Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246

JUN 12 2006

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0148-06

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

RECERTIFICATION PLAN FOR CERTIFIED AREAS AND CERTIFICATION-IN-PROGRESS AREAS WITHIN THE FORMER PRODUCTION AREA FOOTPRINT

References:

1) Letter DOE-0123-06, J. Reising to J. Saric/T. Schneider, "Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certification Areas and Certification-in-Progress Areas," dated May 16, 2006

2) "Project Specific Plan for Area 4A Certification Sampling," Document 20803-PSP-0003, dated April 2005

3) "Certification Design Letter and Certification Project Specific Plan for Area 4B - Part One," Document 20810-PSP-0008, dated September 2005

4) "Certification Design Letter and Certification Project Specific Plan for Area 6 Former Production Area and Main Drainage Corridor Area," Document 20810-PSP-0010, dated January 2006

This letter presents a proposed plan to recertify portions of the certified areas within the Former Production Area (FPA) footprint. Excessive rainfall events in the recent months caused storm water runoff from non-certified areas to overwhelm and breach the runon control berms and ditches of Certified Area 4A, Certified Area 4B - Part One, as well as certification in progress in Area 6 FPA and Main Drainage Corridor (MDC) Area. The storm water runoff may have impacted these areas. Therefore, a recertification/resampling effort is necessary to demonstrate that soils in Areas 4A, 4B - Part One, and Area 6 FPA/MDC have not been impacted by the water crossing the certification boundaries from non-certified areas, and that area-specific constituents of concern (ASCOCs) still meet the soil final remediation levels (FRLs). The enclosed Figure 1 shows the maximum extent of storm water overflow in each area.

Extent of Recertification

On May 10, 2006, samples were collected under Variance 20810-PSP-0008-07 from the southern end of previously certified Area 4B - Part One [certification unit (CU) A4B01] at the same locations of the original certification samples (see Figures 1 and 2). This CU is considered most likely to be recontaminated among all the areas due to the relatively higher concentrations of contaminants detected in the surface water in Area 4B - Part Two. Additionally, this area has been drained and the normal soil sampling procedure could be followed to access the extent of potential impacts in Area 4B - Part One by water crossing the certification boundary from Area 4B - Part Two. No significant changes in residual ASCOC concentrations were detected at most locations. All sample results from this sampling effort were below-FRL, with the exception of one location (A4B-C17-14W), which was 63 milligrams per kilogram for total uranium. This location is at the downgradient edge of the CU adjacent to Area 4B - Part Two (see Figure 2).

Table 1 presents the data collected in CU A4B01 during the original certification and the May 10, 2006 recertification. A statistical analysis of the data is presented in Table 2. Figure 3 is a graphical representation of the average relative percent difference (RPD) between the original certification analytical results and the recertification analytical result. This data analysis demonstrates that uranium is the only constituent of concern for recertification because the rest of the data shows that there was no significant increase in the level of contaminates in the soil. A RPD value of less than 35 percent represents the industry standard for an acceptable duplicate soil analysis (i.e., no significant difference between the certification and recertification values). Based on the results of this recertification sampling effort, the U.S. Department of Energy (DOE) believes that total uranium is the best indicator parameters to reveal any potential recontamination of these areas. Therefore, at a minimum, total uranium will be analyzed as part of the recertification effort.

Results from the recertification of CU A4B01 indicate that proposed recertification sampling in other areas can be delineated to cover swaths of previously certified areas along the certification/breach boundary to complete the overall recertification effort (see Figure 1). These swaths represent worst-case conditions of potential contamination for each certification area that has been inundated with water, as the particulate contamination would have settled closest to the breach line. The certification sample locations that fall within the new CUs match the locations

of the previous certification efforts for each certified area (i.e., Certified Area 4A, Certified Area 4B - Part One, and Area 6 FPA and MDC Area). Therefore, a direct comparison can be made between the data collected during the recertification effort and the previously collected certification samples.

Sampling Approach

The normal soil sampling procedure will be followed in areas that have been drained. However, there are portions of the potentially impacted areas where draining water completely is not practical. The proposed sampling methodology for this recertification effort in areas still under deep water (i.e., A4B02 and A4A01) has been documented in Letter DOE-0123-06, Sampling Methodology for Collecting Soil/Sediment Cores Beneath Water in Submerged Soil Certification Areas and Certification-in-Progress Areas (Reference 1). The sampling method documented in that letter was successfully tested at previous certification sampling locations A4B-C11-3, 6, 7, 9, 11, and 14; and A4B-C09-7, 8, and 13 from Area 4B CU A4B02. A settling period and decanting protocol to retain suspended fine particles were also incorporated into the sampling procedure based on the Ohio Environmental Protection Area's (OEPA's) comment.

Data Evaluation

Certification criteria and soil FRLs specified in the Sitewide Excavation Plan will be used to determine whether a CU still passes soil certification or not (see Table 2). The data collected during this recertification process will also be compared to the data collected under the original certification effort from these locations. If any CUs fail certification for any indicator constituent, then the area of this recertification effort will be expanded (i.e., additional CUs and constituents of concern will be added to the recertification effort) and additional sampling will occur. Based on the recertification results, any necessary soil remediation will be identified and implemented with your approvals. The recertification and remediation efforts (if necessary) will continue until all new CUs in the proposed recertification areas pass the certification criteria.

Documentation

In addition to this letter, a variance will be written to each of the Certification Project Specific Plans (PSPs) for the affected Certification Areas. The affected area documents are PSP for Area 4A Certification Sampling (Reference 2), Certification Design Letter (CDL) and Certification PSP for Area 4B - Part One (Reference 3), and CDL and Certification PSP for Area 6 Former Production Area and Main Drainage Corridor Area (Reference 4). Each variance will contain the CU layout, certification sample locations, constituents of concern, analytical requirements, and the validation requirements.

Once all of the samples have been collected, analyzed, reported, and evaluated, the results of the data from each CU shall be reported in an addendum to their respective Certification Report. CUs A4B01 and A4B02 will be reported in an addendum to the Certification Report for Area 4B - Part One; CU A4A01 will be reported in an addendum to the Certification Report for Area 4A,

and resampling of CU MDC01 will be reported in the Certification Report for Area 6 Former Production Area and Main Drainage Corridor Area. This is the preferred documentation approach verbally communicated to DOE by the U.S. Environmental Protection Agency and OEPA.

If you have any questions or require additional information, please contact me at (513) 648-3139.

Sincerely,

Johnny W. Reising
Director

Enclosure

cc w/enclosures:
J. Desormeau, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosures)
G. Jablonowski, USEPA-V, SRF-5J
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
S. Helmer, ODH
AR Coordinator, Fluor Fernald, Inc./MS6

cc w/o enclosures:
J. Chiou, Fluor Fernald, Inc./MS88
F. Johnston, Fluor Fernald, Inc./MS12
C. Murphy, Fluor Fernald, Inc./MS1

TABLE 1
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B01

CU	Location	Sample ID	Parameter	Re-Cert Result	Re-Cert Qualifier	Original Result	Original Qualifier	Units	RPD	FRL	>FRL	Avg RPD
15	A4B-C15-4	A4B-C15-4^RMP	Aroclor-1254	5.4	J	1.4	NJ	ug/kg	118	130	No	
17	A4B-C17-1	A4B-C17-1^RMP	Aroclor-1254	3.8	U	1.7	U	ug/kg	0	130	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Aroclor-1254	3.7	U	2.1	U	ug/kg	0	130	No	
17	A4B-C17-14	A4B-C17-14^RMP	Aroclor-1254	4	J	3.9	U	ug/kg	3	130	No	
17	A4B-C17-15	A4B-C17-15^RMP	Aroclor-1254	3.9	U	2.4	U	ug/kg	0	130	No	
17	A4B-C17-16	A4B-C17-16^RMP	Aroclor-1254	3.7	U	1.3	U	ug/kg	0	130	No	
17	A4B-C17-2	A4B-C17-2^RMP	Aroclor-1254	3.7	U	3.9	UJ	ug/kg	0	130	No	
17	A4B-C17-3	A4B-C17-3^RMP	Aroclor-1254	3.7	U	3.8	UJ	ug/kg	0	130	No	8
17	A4B-C17-5	A4B-C17-5^RMP	Aroclor-1254	3.8	U	3.9	UJ	ug/kg	0	130	No	
17	A4B-C17-8	A4B-C17-8^RMP	Aroclor-1254	3.8	U	3.9	UJ	ug/kg	0	130	No	
18	A4B-C18-13	A4B-C18-13^RMP	Aroclor-1254	3.9	U	3.8	UJ	ug/kg	0	130	No	
18	A4B-C18-15	A4B-C18-15^RMP	Aroclor-1254	3.9	U	4	UJ	ug/kg	0	130	No	
18	A4B-C18-4	A4B-C18-4^RMP	Aroclor-1254	3.9	U	3.2	NJ	ug/kg	0	130	No	
18	A4B-C18-7	A4B-C18-7^RMP	Aroclor-1254	3.7	U	2.4	NJ	ug/kg	0	130	No	
18	A4B-C18-8	A4B-C18-8^RMP	Aroclor-1254	3.9	U	3.8	UJ	ug/kg	0	130	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Aroclor-1254	3.9	U	3.8	UJ	ug/kg	0	130	No	
15	A4B-C15-4	A4B-C15-4^RMP	Beryllium	0.49	-	0.58	-	mg/kg	17	1.5	No	
17	A4B-C17-1	A4B-C17-1^RMP	Beryllium	0.24	-	0.195	U	mg/kg	21	1.5	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Beryllium	0.26	-	0.214	U	mg/kg	19	1.5	No	
17	A4B-C17-14	A4B-C17-14^RMP	Beryllium	0.32	-	0.421	-	mg/kg	27	1.5	No	
17	A4B-C17-15	A4B-C17-15^RMP	Beryllium	0.38	-	0.248	U	mg/kg	42	1.5	No	
17	A4B-C17-16	A4B-C17-16^RMP	Beryllium	0.31	-	0.338	U	mg/kg	9	1.5	No	
17	A4B-C17-2	A4B-C17-2^RMP	Beryllium	0.5	-	0.432	U	mg/kg	15	1.5	No	
17	A4B-C17-3	A4B-C17-3^RMP	Beryllium	0.37	-	0.272	U	mg/kg	31	1.5	No	27
17	A4B-C17-5	A4B-C17-5^RMP	Beryllium	0.35	-	0.419	-	mg/kg	18	1.5	No	
17	A4B-C17-8	A4B-C17-8^RMP	Beryllium	0.37	-	0.385	-	mg/kg	4	1.5	No	
18	A4B-C18-13	A4B-C18-13^RMP	Beryllium	0.21	-	0.25	-	mg/kg	17	1.5	No	
18	A4B-C18-15	A4B-C18-15^RMP	Beryllium	0.29	-	0.91	-	mg/kg	103	1.5	No	
18	A4B-C18-4	A4B-C18-4^RMP	Beryllium	0.42	-	0.5	-	mg/kg	17	1.5	No	
18	A4B-C18-7	A4B-C18-7^RMP	Beryllium	0.27	-	0.42	-	mg/kg	43	1.5	No	
18	A4B-C18-8	A4B-C18-8^RMP	Beryllium	0.39	-	0.47	-	mg/kg	19	1.5	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Beryllium	0.36	-	0.52	-	mg/kg	36	1.5	No	
15	A4B-C15-4	A4B-C15-4^RMP	Radium-226	0.791	NV	0.862	-	pCi/g	9	1.7	No	
17	A4B-C17-1	A4B-C17-1^RMP	Radium-226	0.601	NV	0.639	-	pCi/g	6	1.7	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Radium-226	0.573	NV	0.711	-	pCi/g	21	1.7	No	
17	A4B-C17-14	A4B-C17-14^RMP	Radium-226	0.942	NV	0.948	-	pCi/g	1	1.7	No	
17	A4B-C17-15	A4B-C17-15^RMP	Radium-226	0.912	NV	0.938	-	pCi/g	3	1.7	No	
17	A4B-C17-16	A4B-C17-16^RMP	Radium-226	0.784	NV	0.846	-	pCi/g	8	1.7	No	
17	A4B-C17-2	A4B-C17-2^RMP	Radium-226	1.01	NV	1.19	-	pCi/g	16	1.7	No	
17	A4B-C17-3	A4B-C17-3^RMP	Radium-226	0.714	NV	0.873	-	pCi/g	20	1.7	No	12
17	A4B-C17-5	A4B-C17-5^RMP	Radium-226	0.758	NV	0.734	-	pCi/g	3	1.7	No	
17	A4B-C17-8	A4B-C17-8^RMP	Radium-226	0.827	NV	1.05	-	pCi/g	24	1.7	No	
18	A4B-C18-13	A4B-C18-13^RMP	Radium-226	0.69	NV	0.765	-	pCi/g	10	1.7	No	
18	A4B-C18-15	A4B-C18-15^RMP	Radium-226	0.767	NV	0.933	-	pCi/g	20	1.7	No	
18	A4B-C18-4	A4B-C18-4^RMP	Radium-226	0.648	NV	0.797	-	pCi/g	21	1.7	No	
18	A4B-C18-7	A4B-C18-7^RMP	Radium-226	0.728	NV	0.817	-	pCi/g	12	1.7	No	
18	A4B-C18-8	A4B-C18-8^RMP	Radium-226	0.842	NV	0.833	-	pCi/g	1	1.7	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Radium-226	0.979	NV	0.794	-	pCi/g	21	1.7	No	

TABLE 1
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B01

CU	Location	Sample ID	Parameter	Re-Cert Result	Re-Cert Qualifier	Original Result	Original Qualifier	Units	RPD	FRL	>FRL	Avg RPD
15	A4B-C15-4	A4B-C15-4^RMP	Radium-228	0.759	NV	0.703	-	pCi/g	8	1.8	No	15
17	A4B-C17-1	A4B-C17-1^RMP	Radium-228	0.518	NV	0.417	J	pCi/g	22	1.8	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Radium-228	0.504	NV	0.521	J	pCi/g	3	1.8	No	
17	A4B-C17-14	A4B-C17-14^RMP	Radium-228	1.04	NV	0.779	J	pCi/g	29	1.8	No	
17	A4B-C17-15	A4B-C17-15^RMP	Radium-228	0.749	NV	0.682	J	pCi/g	9	1.8	No	
17	A4B-C17-16	A4B-C17-16^RMP	Radium-228	0.613	NV	0.604	J	pCi/g	1	1.8	No	
17	A4B-C17-2	A4B-C17-2^RMP	Radium-228	0.913	NV	0.688	J	pCi/g	28	1.8	No	
17	A4B-C17-3	A4B-C17-3^RMP	Radium-228	0.613	NV	0.792	J	pCi/g	25	1.8	No	
17	A4B-C17-5	A4B-C17-5^RMP	Radium-228	0.63	NV	0.496	J	pCi/g	24	1.8	No	
17	A4B-C17-8	A4B-C17-8^RMP	Radium-228	0.666	NV	0.927	J	pCi/g	33	1.8	No	
18	A4B-C18-13	A4B-C18-13^RMP	Radium-228	0.494	NV	0.494	-	pCi/g	0	1.8	No	
18	A4B-C18-15	A4B-C18-15^RMP	Radium-228	0.666	NV	0.787	-	pCi/g	17	1.8	No	
18	A4B-C18-4	A4B-C18-4^RMP	Radium-228	0.559	NV	0.668	-	pCi/g	18	1.8	No	
18	A4B-C18-7	A4B-C18-7^RMP	Radium-228	0.541	NV	0.56	-	pCi/g	3	1.8	No	
18	A4B-C18-8	A4B-C18-8^RMP	Radium-228	0.599	NV	0.741	-	pCi/g	21	1.8	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Radium-228	0.75	NV	0.719	-	pCi/g	4	1.8	No	
15	A4B-C15-4	A4B-C15-4^RMP	Technetium-99	1.17	UNV	1.11	U	pCi/g	0	30	No	0
17	A4B-C17-1	A4B-C17-1^RMP	Technetium-99	1.25	UNV	0.766	U	pCi/g	0	30	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Technetium-99	1.18	UNV	0.722	U	pCi/g	0	30	No	
17	A4B-C17-14	A4B-C17-14^RMP	Technetium-99	1.26	UNV	0.783	U	pCi/g	0	30	No	
17	A4B-C17-15	A4B-C17-15^RMP	Technetium-99	1.25	UNV	0.78	U	pCi/g	0	30	No	
17	A4B-C17-16	A4B-C17-16^RMP	Technetium-99	1.17	UNV	0.773	U	pCi/g	0	30	No	
17	A4B-C17-2	A4B-C17-2^RMP	Technetium-99	1.3	UNV	0.799	U	pCi/g	0	30	No	
17	A4B-C17-3	A4B-C17-3^RMP	Technetium-99	1.13	UNV	0.741	U	pCi/g	0	30	No	
17	A4B-C17-5	A4B-C17-5^RMP	Technetium-99	1.37	UNV	0.761	U	pCi/g	0	30	No	
17	A4B-C17-8	A4B-C17-8^RMP	Technetium-99	1.2	UNV	0.815	U	pCi/g	0	30	No	
18	A4B-C18-13	A4B-C18-13^RMP	Technetium-99	1.1	UNV	1.15	U	pCi/g	0	30	No	
18	A4B-C18-15	A4B-C18-15^RMP	Technetium-99	1.33	UNV	1.17	U	pCi/g	0	30	No	
18	A4B-C18-4	A4B-C18-4^RMP	Technetium-99	1.26	UNV	1.18	U	pCi/g	0	30	No	
18	A4B-C18-7	A4B-C18-7^RMP	Technetium-99	1.26	UNV	1.22	U	pCi/g	0	30	No	
18	A4B-C18-8	A4B-C18-8^RMP	Technetium-99	1.22	UNV	1.09	U	pCi/g	0	30	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Technetium-99	1.14	UNV	1.01	U	pCi/g	0	30	No	
15	A4B-C15-4	A4B-C15-4^RMP	Thorium-228	0.783	NV	0.715	-	pCi/g	9	1.7	No	18
17	A4B-C17-1	A4B-C17-1^RMP	Thorium-228	0.535	NV	0.441	J	pCi/g	19	1.7	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Thorium-228	0.483	NV	0.547	J	pCi/g	12	1.7	No	
17	A4B-C17-14	A4B-C17-14^RMP	Thorium-228	1.06	NV	0.792	J	pCi/g	29	1.7	No	
17	A4B-C17-15	A4B-C17-15^RMP	Thorium-228	0.752	NV	0.674	J	pCi/g	11	1.7	No	
17	A4B-C17-16	A4B-C17-16^RMP	Thorium-228	0.624	NV	0.603	J	pCi/g	3	1.7	No	
17	A4B-C17-2	A4B-C17-2^RMP	Thorium-228	0.924	NV	0.676	J	pCi/g	31	1.7	No	
17	A4B-C17-3	A4B-C17-3^RMP	Thorium-228	0.626	NV	0.871	J	pCi/g	33	1.7	No	
17	A4B-C17-5	A4B-C17-5^RMP	Thorium-228	0.62	NV	0.506	J	pCi/g	20	1.7	No	
17	A4B-C17-8	A4B-C17-8^RMP	Thorium-228	0.673	NV	0.927	J	pCi/g	32	1.7	No	
18	A4B-C18-13	A4B-C18-13^RMP	Thorium-228	0.508	NV	0.484	-	pCi/g	5	1.7	No	
18	A4B-C18-15	A4B-C18-15^RMP	Thorium-228	0.65	NV	0.763	-	pCi/g	16	1.7	No	
18	A4B-C18-4	A4B-C18-4^RMP	Thorium-228	0.538	NV	0.683	-	pCi/g	24	1.7	No	
18	A4B-C18-7	A4B-C18-7^RMP	Thorium-228	0.539	NV	0.574	-	pCi/g	6	1.7	No	
18	A4B-C18-8	A4B-C18-8^RMP	Thorium-228	0.583	NV	0.743	-	pCi/g	24	1.7	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Thorium-228	0.752	NV	0.711	-	pCi/g	6	1.7	No	

TABLE 1
COMPARISON OF CERTIFICATION AND RECERTIFICATION DATA FOR CU A4B01

CU	Location	Sample ID	Parameter	Re-Cert Result	Re-Cert Qualifier	Original Result	Original Qualifier	Units	RPD	FRL	>FRL	Avg RPD
15	A4B-C15-4	A4B-C15-4^RMP	Thorium-232	0.759	NV	0.703	-	pCi/g	8	1.5	No	15
17	A4B-C17-1	A4B-C17-1^RMP	Thorium-232	0.518	NV	0.417	J	pCi/g	22	1.5	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Thorium-232	0.504	NV	0.521	J	pCi/g	3	1.5	No	
17	A4B-C17-14	A4B-C17-14^RMP	Thorium-232	1.04	NV	0.779	J	pCi/g	29	1.5	No	
17	A4B-C17-15	A4B-C17-15^RMP	Thorium-232	0.749	NV	0.682	J	pCi/g	9	1.5	No	
17	A4B-C17-16	A4B-C17-16^RMP	Thorium-232	0.613	NV	0.604	J	pCi/g	1	1.5	No	
17	A4B-C17-2	A4B-C17-2^RMP	Thorium-232	0.913	NV	0.688	J	pCi/g	28	1.5	No	
17	A4B-C17-3	A4B-C17-3^RMP	Thorium-232	0.613	NV	0.792	J	pCi/g	25	1.5	No	
17	A4B-C17-5	A4B-C17-5^RMP	Thorium-232	0.63	NV	0.496	J	pCi/g	24	1.5	No	
17	A4B-C17-8	A4B-C17-8^RMP	Thorium-232	0.666	NV	0.927	J	pCi/g	33	1.5	No	
18	A4B-C18-13	A4B-C18-13^RMP	Thorium-232	0.494	NV	0.494	-	pCi/g	0	1.5	No	
18	A4B-C18-15	A4B-C18-15^RMP	Thorium-232	0.666	NV	0.787	-	pCi/g	17	1.5	No	
18	A4B-C18-4	A4B-C18-4^RMP	Thorium-232	0.559	NV	0.668	-	pCi/g	18	1.5	No	
18	A4B-C18-7	A4B-C18-7^RMP	Thorium-232	0.541	NV	0.56	-	pCi/g	3	1.5	No	
18	A4B-C18-8	A4B-C18-8^RMP	Thorium-232	0.599	NV	0.741	-	pCi/g	21	1.5	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Thorium-232	0.75	NV	0.719	-	pCi/g	4	1.5	No	
15	A4B-C15-4	A4B-C15-4^RMP	Uranium, Total	5.61	NV	3.96	J	mg/kg	34	20	No	38
17	A4B-C17-1	A4B-C17-1^RMP	Uranium, Total	2.83	NV	4.39	-	mg/kg	43	20	No	
17	A4B-C17-1	A4B-C17-1^RMP-D	Uranium, Total	4.54	NV	3.7	-	mg/kg	20	20	No	
17	**A4B-C17-14**	**A4B-C17-14^RMP**	**Uranium, Total**	**63**	NV	**16.1**	**-**	**mg/kg**	119	**20**	**Yes**	
17	A4B-C17-15	A4B-C17-15^RMP	Uranium, Total	6.44	NV	1.62	U	mg/kg	120	20	No	
17	A4B-C17-16	A4B-C17-16^RMP	Uranium, Total	4.54	NV	5.25	-	mg/kg	15	20	No	
17	A4B-C17-2	A4B-C17-2^RMP	Uranium, Total	6.13	NV	5.27	-	mg/kg	15	20	No	
17	A4B-C17-3	A4B-C17-3^RMP	Uranium, Total	4.95	NV	3.4	-	mg/kg	37	20	No	
17	A4B-C17-5	A4B-C17-5^RMP	Uranium, Total	4.03	NV	1.98	J	mg/kg	68	20	No	
17	A4B-C17-8	A4B-C17-8^RMP	Uranium, Total	2.97	NV	4.19	-	mg/kg	34	20	No	
18	A4B-C18-13	A4B-C18-13^RMP	Uranium, Total	4.07	NV	2.94	J	mg/kg	32	20	No	
18	A4B-C18-15	A4B-C18-15^RMP	Uranium, Total	3.51	NV	3.79	J	mg/kg	8	20	No	
18	A4B-C18-4	A4B-C18-4^RMP	Uranium, Total	3.8	NV	3.72	J	mg/kg	2	20	No	
18	A4B-C18-7	A4B-C18-7^RMP	Uranium, Total	3.86	NV	3.3	-	mg/kg	16	20	No	
18	A4B-C18-8	A4B-C18-8^RMP	Uranium, Total	6.17	NV	4.91	-	mg/kg	23	20	No	
18	A4B-C18-8	A4B-C18-8^RMP-D	Uranium, Total	6.97	NV	5.39	-	mg/kg	26	20	No	

TABLE 2
STATISTICAL ANALYSIS OF RECERTIFICATION DATA FOR CU A4B01

	Primary COCs					Secondary COCs		
SAMPLE_ID	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Technetium-99	Beryllium	Aroclor-1254
A4B-C15-4W^RMP	0.791 NV	0.759 NV	0.783 NV	0.759 NV	5.61 NV	1.17 UNV	0.49 -	5.40 J
A4B-C17-1W^RMP	0.601 NV	0.518 NV	0.535 NV	0.518 NV	2.83 NV	1.25 UNV	0.24 -	3.80 U
A4B-C17-14W^RMP	0.942 NV	1.04 NV	1.06 NV	1.04 NV	63 NV	1.26 UNV	0.32 -	4.00 J
A4B-C17-15W^RMP	0.912 NV	0.749 NV	0.752 NV	0.749 NV	6.44 NV	1.25 UNV	0.38 -	3.90 U
A4B-C17-16W^RMP	0.784 NV	0.613 NV	0.624 NV	0.613 NV	4.54 NV	1.17 UNV	0.31 -	3.70 U
A4B-C17-2W^RMP	1.01 NV	0.913 NV	0.924 NV	0.913 NV	6.13 NV	1.30 UNV	0.50 -	3.70 U
A4B-C17-3W^RMP	0.714 NV	0.613 NV	0.626 NV	0.613 NV	4.95 NV	1.13 UNV	0.37 -	3.70 U
A4B-C17-5W^RMP	0.758 NV	0.63 NV	0.62 NV	0.63 NV	4.03 NV	1.37 UNV	0.35 -	3.80 U
A4B-C17-8W^RMP	0.827 NV	0.666 NV	0.673 NV	0.666 NV	2.97 NV	1.20 UNV	0.37 -	3.80 U
A4B-C18-13W^RMP	0.69 NV	0.494 NV	0.508 NV	0.494 NV	4.07 NV	1.10 UNV	0.21 -	3.90 U
A4B-C18-15W^RMP	0.767 NV	0.666 NV	0.65 NV	0.666 NV	3.51 NV	1.33 UNV	0.29 -	3.90 U
A4B-C18-4W^RMP	0.648 NV	0.559 NV	0.538 NV	0.559 NV	3.8 NV	1.26 UNV	0.42 -	3.90 U
A4B-C18-7W^RMP	0.728 NV	0.541 NV	0.539 NV	0.541 NV	3.86 NV	1.26 UNV	0.27 -	3.70 U
A4B-C18-8W^RMP	0.979 NV	0.75 NV	0.752 NV	0.75 NV	6.97 NV	1.22 UNV	0.39 -	3.90 U
Limit	1.7	1.8	1.7	1.5	20	30	1.5	130
Units	pCi/g	pCi/g	pCi/g	pCi/g	µg/g	pCi/g	mg/kg	mg/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%
Max. Result	1.01	1.040	1.06	1.04	63	1.370 U	0.50	5.40
Max. >= Limit	No	No	No	No	Yes	No	No	No
W-statistic Prob. #	--	--	--	--	< 0.01% (LN)	--	--	--
Test Procedure	--	--	--	--	Median (Sign)	--	--	--
Sample Size	14	14	14	14	14	14	14	14
Nondetects	0	0	0	0	0	14	0	12
% Nondetects	0%	0%	0%	0%	0%	100%	0%	86%
Est. Mean*	--	--	--	--	4.540	--	--	--
UCL	--	--	--	--	6.13	--	--	--
Prob. > Limit	--	--	--	--	--	--	--	--
Pass / Fail	--	--	--	--	Pass	--	--	--
a posteriori Sample	--	--	--	--	6	--	--	--
Size calculation	--	--	--	--	Pass	--	--	--

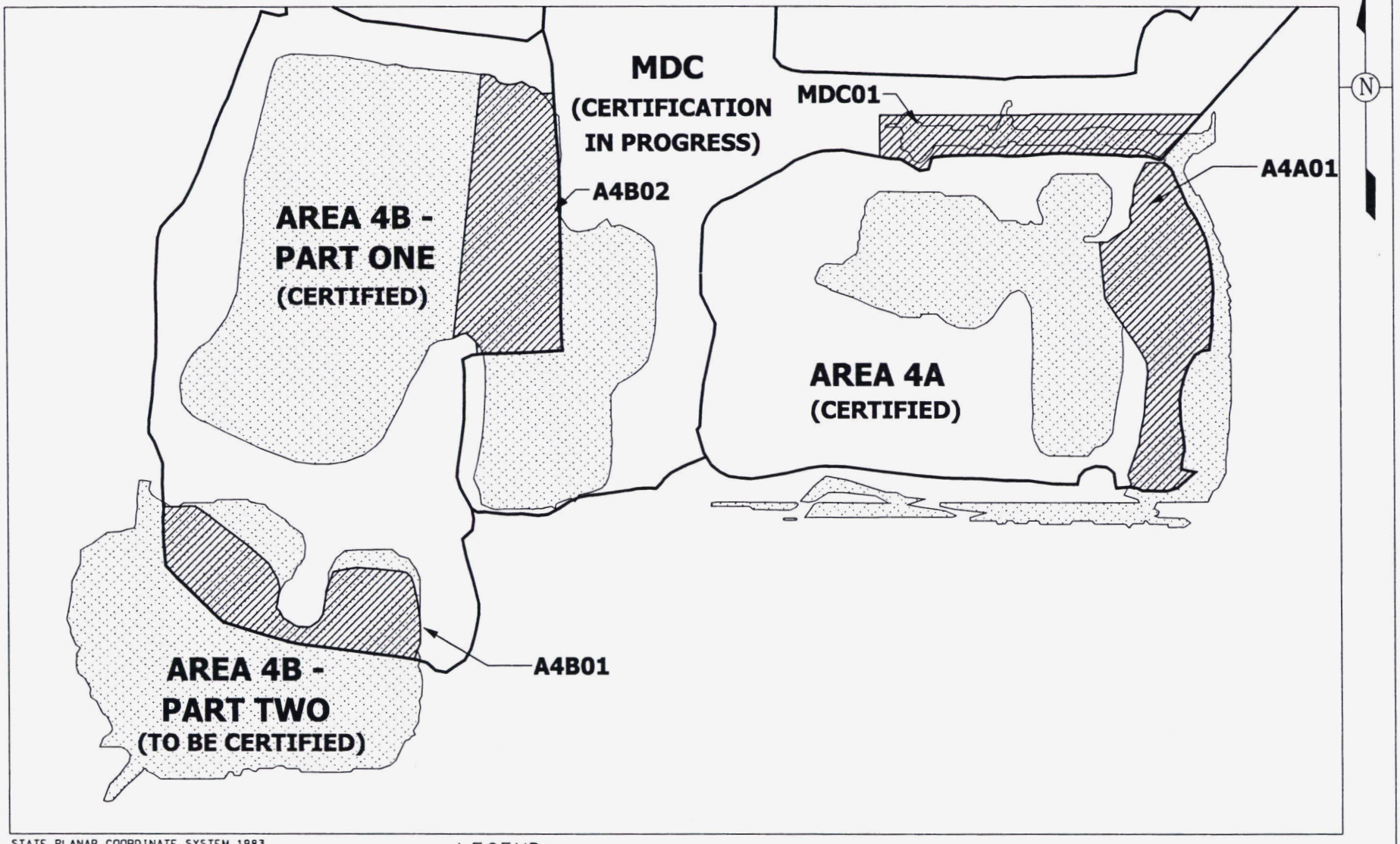
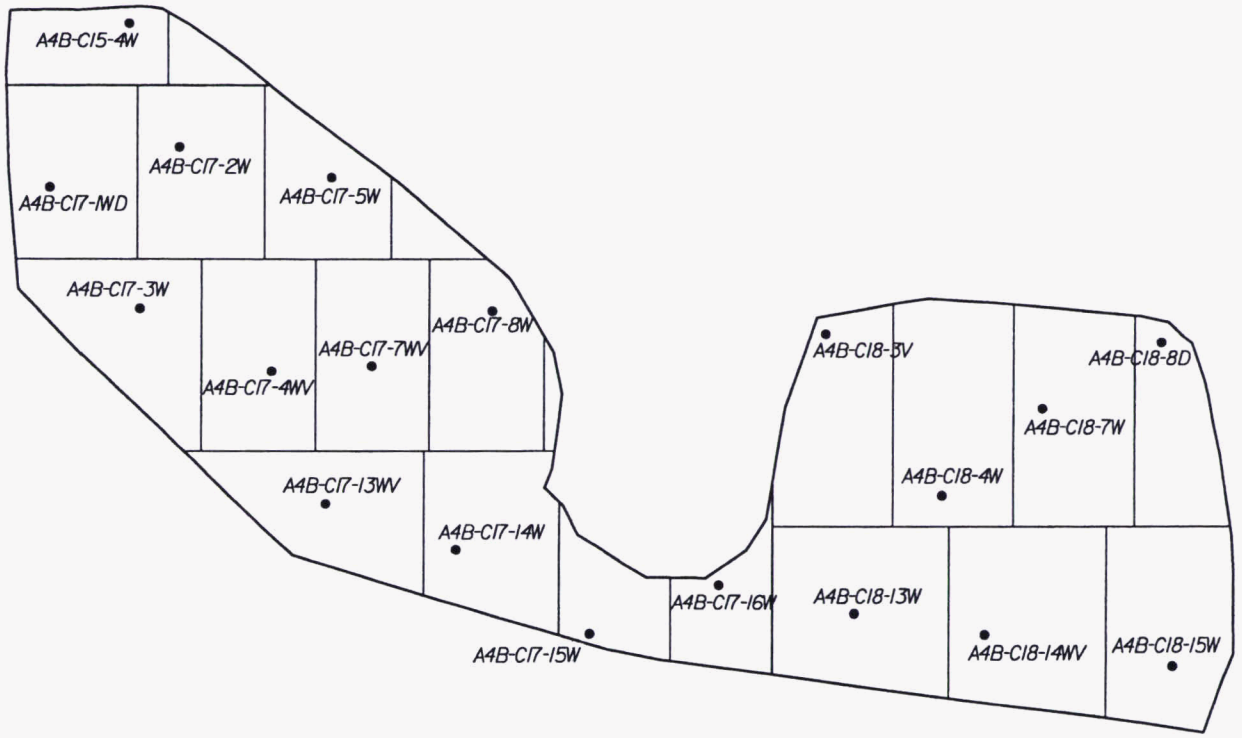


FIGURE 1. MAXIMUM EXTENT OF STORM WATER OVERFLOW IN CERTIFIED AREAS



LEGEND:

• SAMPLE LOCATION

SCALE

70 35 0 70 FEET

DRAFT

V:*2fm12*dgn*4b_flood_cu.dgn
STATE PLANAR COORDINATE SYSTEM 1983

FIGURE 2. RE-CERTIFICATION SAMPLING LOCATIONS FOR CU A4B01

06-JUN-2006

006170

Figure 3